711

33rd 6mg

[0026]

In another alternative embodiment, the TSPS 103, the registration server 106, and databases 104, 105, and 107-109 are integrated into a single server computer. Thus, the TSPS 103 and registration server 106, and databases 104, 105, and 107-109 shown in Figure 1 represent logical connections in this alternative embodiment. Although not required, aspects of the invention will be described herein in the general context of computer-executable instructions, such as routines executed by a general-purpose computer, e.g., a server or personal computer. Those skilled in the relevant art will appreciate that these aspects of the invention can be practiced with other computer system configurations, including Internet appliances, hand-held devices, wearable computers, cellular or mobile phones, multi-processor systems, microprocessor-based or programmable consumer electronics, set-top boxes (such as for use with cable TV), network PCs, mini-computers, mainframe computers, and the like. The invention can be embodied in a special purpose computer or data processor specifically programmed, configured or constructed to perform one or more of the computerexecutable instructions explained in detail below. Indeed, the term "computer," as generally used herein, refers to any of the above devices, as well as any data processor.

[0027]

While not shown, the computers described herein, including the server 106, TSPS 103 and computer 111, include one or more central processing units or other logical processing circuitry, memory, input devices (e.g., keyboards and pointing devices), output devices (e.g., display devices and printers), and storage devices (e.g., fixed and floppy magnetic disk drives, optical disk drives and card readers), all well known, but not shown. While shown as separate components, databases, such as the database 106, may form part of, or be integrated with, the server computer. The computers may include other program modules not described herein, such as an operating system, one or more application programs (e.g., word processing or spreadsheet applications), a web browser, and the like. Unless described otherwise, the construction and operation of the various blocks shown in the figures are of conventional design. As a result, such blocks need

not be described in further detail herein, as they will be readily understood by those skilled in the relevant art.

[0028]

The invention can also be practiced in distributed computing environments. where tasks or modules are performed by remote processing devices, which are linked through a communications network. In a distributed computing environment, program modules or subroutines may be located in both local and remote memory storage devices. Aspects of the invention described herein may be stored or distributed on computer-readable media, including magnetic and optically readable and removable computer disks, hard-wired or preprogrammed in chips (e.g., EEPROM semiconductor chips), as well as distributed electronically over the Internet or via other networks (including wireless networks). Processes or software components under aspects of the invention may be created under various ways, such as through source code programming, created as microcode or programmed logic arrays, or the like. Those skilled in the relevant art will recognize that portions of the invention reside on a server computer, while corresponding portions may reside on a client computer (such as the user computer 111). Data structures and transmission of data particular to aspects of the invention are also encompassed within the scope of the invention.

[0029]

Embodiments described herein include the TSPS 103 interfacing with the contact management software 114 through the interface component 113 to provide call handling to the user through the single user interface 112. In one embodiment, the user populates a database associated with the contact management software 114 with contact information. The contact information includes names, addresses, email addresses, phone number, etc. such as the user's contact's name, home and business telephone number, and email address. According to an embodiment, an unused portion of a data field in the contact management software 114 database is populated with a handling code. The handling code is innocuous in the contact management software 114 environment. In one embodiment, a two digit handling code is one of a group of

codes that each refers to a particular handling method. Handling methods include forwarding a call to another number, notifying the user the call has been received, forwarding the call to voicemail, forwarding the call to a Internet chat session between the user and the caller, sending an instant message, and playing various messages to the caller such as an "unavailable" message, an "out of town" message, a "touch 0" message, many various prompts, etc.

[0030]

The user associates the handling codes with the handling methods in the TSPS as part of configuration of the TSPS. Thus the user may enter the desired two digit code for selected contacts in the contact management software 114. A user may have many pre-defined call handling methods stored in the user profiles database 104, and may select the call handling method to be used at any time, by selecting for example a numeric code which is associated with that call handling method. Thus, the user may alter or change predefined call handling methods using any known user interface, such as via the user's telephone (landline or mobile phone), via computer network such as a web interface coupling the user's computer with the registration server 106, via a wireless portable palm top or wearable computer, via a wireless pager, via set-top box or other consumer premises equipment, or any other equipment.

[0031]

The interface component 113, residing on the user's computer 111, will either periodically, or manually as directed by the user via the interface component 112, read the contact information employing well known and published API interfaces to the contact management software's database. This software will then pass the specific numeric code associated with each contact to the communications software component 112, which in turn will pass this data through the Internet 110 to the registration server 106, which will again in turn pass this data to the contact information database 108 for storage. **Figure 2** is a flow diagram illustrating the operation of an embodiment of the voice data management system 100. Unless described otherwise herein, the blocks depicted in Figure 2 are well known or described in detail in the above cross-referenced provisional patent application. Indeed, much of the detailed